

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7 and 9-11, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elqadah et al. (U.S. Pat. No. 6,203,058 B1) in view of Ono (JP 2001-328503; as cited by Applicant) and Tesch (U.S. Pat. No. 6,758,492 B2).

Elqadah et al. discloses an inflatable curtain being mounted in position above the side window opening and defining a lower edge region including an inflatable curtain lower edge, and being configured so that, when inflated, a portion of the lower edge region of the inflatable curtain extends beneath the lower edge of the side window opening (Figure 3).

Elqadah et al. discloses the claimed invention as discussed above but does not disclose that the inflatable curtain defines a plurality of inflatable cells that extend below the lower edge of the side window opening. Ono, however, does disclose that the inflatable curtain defines a plurality of inflatable cells that extend below the lower edge of the side window opening (Figure 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Elqadah et al. in view of the teachings of Ono to have a plurality of inflatable cells extending below the lower edge of the side window in order to further control the deployment characteristics of the curtain airbag.

A forward part of the inflatable curtain is secured to the vehicle at a first anchoring point and a rear part of the inflatable is secured to the vehicle at a second anchoring point (Figure 3), the inflatable cells being configured so that a virtual line of tension is created between the anchoring points when the inflatable curtain is inflated. The inflatable cells are configured so that the longitudinal axis of each cell is substantially perpendicular to the line of tension at least beneath the line of tension (Figure 3), and a tensioning unit (52a, 54a) is provided at one of the

anchoring points to apply tension to part of the inflatable curtain. The part of the inflatable curtain is a strap (110, 120) extending from an inflatable region of the inflatable curtain to the tensioning unit (Figure 3).

Elqadah et al. does not disclose that the virtual line of tension is created between the anchoring points above the lower edge of the side window. Tesch, however, discloses a virtual line of tension (between straps 124) that extends above the lower edge of the side window (Figure 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Elqadah et al. in view of the teachings of Tesch, since it has been held that rearranging parts of an invention involves only routine skill in the art and would yield the predictable result of keeping the airbag close to the side window during deployment.

Elqadah et al. also does not disclose that the degree of overlap of the lower edge region of the inflatable curtain and the window opening lower edge is between 50 and 60 millimetres. However, it would have been an obvious matter of design choice to make the lower edge region extend 50-60 mm below, since such a modification would have involved a mere change in the size of a component and selection of an optimal range. A change in size and selecting an optimal range suitable for a particular application are generally recognized as being within the level of ordinary skill in the art.

3. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elqadah et al. in view of Tanase et al., and further in view of Bailey et al. (U.S. Pat. No. 6,237,941 B1).

The combination of Elqadah et al. and Tanase et al. discloses the claimed invention as discussed above but does not disclose that the inflatable cushion further forms a re-entrant slot in the lower edge thereof, the slot being substantially in alignment with a structural post of the vehicle.

Bailey et al., however, discloses a non-inflatable region (22a) formed in the lower edge thereof, the region being substantially in alignment with a structural post of the vehicle. In column 2, lines 57-60, Bailey et al. discloses that no measurable degree of occupant protection would be provided if the non-inflatable region were inflated. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to remove the

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non-inflatable region to form a slot, since removal of non-essential elements is obvious to one skilled in the art when the function of the invention remains the same. Also, it would have been obvious to have this re-entrant slot in order to utilize the minimum amount of material possible to provide optimal protection at minimal cost.

Response to Arguments

4. Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DREW J. BROWN whose telephone number is (571)272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Drew J. Brown
Examiner
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6/4/08
/Ruth Ilan/
Primary Examiner, Art Unit 3616